HAHN AND ASSOCIATES, INC.

ENVIRONMENTAL CONSULTANTS

November 15, 2011

Mr. Dana Bayuk Oregon Department of Environmental Quality Northwest Region, Portland Office Portland Harbor Section 2020 SW Fourth Avenue, Suite 400 Portland Oregon 97201-4987

HAI Project No. 2708 DEQ ECSI File No. 84

SUBJECT: Progress Report, NW Natural Gasco Property, 7900 NW St. Helens Avenue, Portland, Oregon

Dear Mr. Bayuk:

Hahn and Associates, Inc. (HAI) has prepared this monthly Progress Report summarizing Remedial Investigation/Feasibility Study (RI/FS) and source control-related work activities conducted by NW Natural that have occurred relating to the Gasco property during the month of October 2011. NW Natural is completing upland investigatory activities at the subject property under the Voluntary Agreement No. ECVC-WMCVC-NWR-94-13 (Voluntary Agreement) between NW Natural and the Oregon Department of Environmental Quality (DEQ).

1.0 Communications and Document Submittals

A meeting with representatives of NW Natural and DEQ was conducted on October 4, 2011. The purpose of this meeting was to discuss functional steps necessary in moving forward with efforts to finalize the Gasco uplands risk assessment.

An informal meeting with representatives of NW Natural, DEQ, and EPA was held on October 5 for NW Natural to propose a potential path forward for completing source control design on an expedited schedule that will allow testing of the installed extraction system to inform the sediment remedy design.

In e-mail correspondence dated October 10, 2011 (Ben Hung to Dana Bayuk), Anchor QEA (AQ), on behalf of NW Natural provided a summary of the 6-step process for resolution / completion of the Gasco uplands risk assessment.

In e-mail correspondence dated October 12, 2011 (Dana Bayuk to Ben Hung), DEQ provided comments on NW Natural's October 10, 2011 6-step process for completion of the Gasco uplands risk assessment.

In e-mail correspondence dated October 12, 2011 (Ben Hung to Dana Bayuk), AQ, on behalf of NW Natural, transmitted a draft Meeting Summary for the August 15, 2011 Risk Assessment meeting with NW Natural and DEQ.

In e-mail correspondence dated October 12, 2011 (Dana Bayuk to Ben Hung), DEQ responded to a voice mail from Ben Hung inquiring about the need for the regularly monthly technical meeting scheduled for Monday October 17th. DEQ indicated that because neither team was prepared to discuss the source control path forward that it made sense to cancel the meeting.

In e-mail correspondence dated October 14, 2011 (Ben Hung to Dana Bayuk), AQ, on behalf of NW Natural, provided responses to DEQ's October 12, 2011 comments on the 6-step process for Gasco uplands risk assessment resolution / completion.

In correspondence dated October 21, 2011, HAI, on behalf of NW Natural, submitted the report *Updated Beneficial Use Determination for Groundwater, NW Natural Gasco and Siltronic Properties, 7900 NW St. Helens Road and 7200 NW Front Avenue, Portland, Oregon*, dated October 21, 2011.

In e-mail correspondence dated October 21, 2011 (Dana Bayuk to Ben Hung), DEQ provided responses to NW Naturals October 14, 2011 correspondence regarding the 6-step process for Gasco uplands risk assessment resolution / completion.

In correspondence dated October 25, 2011 (Dana Bayuk to Bob Wyatt), DEQ provided comments from review of the August 12, 2011 AQ document entitled *TPH Fraction Data Gaps Field Sampling Plan for the NW Natural Gasco Site*.

In correspondence dated October 31, 2011 (Taku Fuji and Kara Hitchko to Dana Bayuk), AQ, on behalf of NW Natural, provided a technical memorandum to DEQ providing technical justification for a proposed alternative ecological cyanide screening level for soils.

2.0 Field Work

Field activities related to monitoring and maintenance of the dense non-aqueous phase liquid (DNAPL) extraction system at surficial fill well locations MW-6-32 and MW-13-30 occurred during October. The system recovered approximately 11 gallons of fluids (primarily DNAPL) during October. A gas regulator failed in October causing the system to remain off for approximately two weeks while awaiting receipt of a replacement part.

Discharge of treated water (groundwater from the LNG containment basin) to the City of Portland sanitary sewer was initiated on March 16, 2007 under Temporary Wastewater Discharge Permit 500.022 (expires February 15, 2012). Results of NW Natural's effluent sampling are provided to BES in Discharge Monitoring Reports that are submitted for any month that effluent sampling occurs – which is at least every other month in accordance with the permit. As of October 28, a total of 9,605,235 gallons of treated water have been discharged to the sanitary sewer in 2011.

To coordinate with Siltronic scheduling, the final two days of groundwater sampling for the Third Quarter 2011 routine groundwater monitoring event were completed in October (October 11 and 12). All other activities related to the Third Quarter monitoring event were completed during the latter half of September.

3.0 Anticipated Activities in November and December 2011

NW Natural and DEQ technical working group meetings are anticipated to occur during November and December as needed so that discussion of critical items related to upland risk assessment and groundwater source control tasks may be conducted.

NW Natural will provide a Response to DEQ's September 22, 2011 letter commenting on the May 2011 Draft Groundwater Source Control Final Design Report, NW Natural Gasco Site (submitted November 4, 2011).

The Fourth Quarter 2011 routine groundwater monitoring event (water level measurements and DNAPL checks) will occur in December.

The following reports and work plans on the Site have been submitted to DEQ through the end of October that have not as of the date of this Progress Report received DEQ review and comment.

- Source Control Evaluation Report, "Segment 3" Siltronic Property Related to NW Natural "Gasco" Site, February 19, 2009, Anchor QEA. Based on DEQ feedback, DEQ review of this document is prioritized behind reviews for Segments 1 and 2 Source Control Design documents and upland Risk Assessment-related reviews.
- Final Stormwater Source Control Data Summary Report, September 2010, Anchor QEA. Based on DEQ feedback, DEQ review of this document is prioritized behind reviews for Segments 1 and 2 Source Control Design documents and upland Risk Assessment-related reviews.
- Remedial Investigation Data Summary Report, Historical Manufactured Gas Plant Activities, Siltronic Corporation Property, March 31, 2011, HAI.
- Updated Beneficial Use Determination for Groundwater, NW Natural Gasco and Siltronic Properties, 7900 NW St. Helens Road and 7200 NW Front Avenue, Portland, Oregon, October 21, 2011, HAI.
- Technical Memorandum describing technical justification for a proposed alternative ecological cyanide screening level for soils, October 31, 2011, Anchor QEA.

Should you have any questions, please contact the undersigned.

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Rob Ede, R.G.

Principal

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 - Mr. John Edwards, Anchor QEA, L.L.C. (electronic only)
 - Mr. Ben Hung, Anchor QEA, L.L.C. (electronic only)
 - Mr. Ryan Barth, Anchor QEA, L.L.C. (electronic only)
 - Mr. Henning Larsen, DEQ NW Region (electronic only)
 - Mr. Tom Gainer, DEQ NW Region (electronic only)
 - Mr. Tom McCue, Siltronic Corporation (electronic only)
 - Ms. Kristine Koch, Region 10 EPA (electronic only)
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 - Mr. Rene Fuentes, Region 10 EPA (electronic only) Mr. Chip Humphrey, Region 10 EPA (electronic only)
 - Mr. Lance Peterson, CDM, Inc. (electronic only)